

REMARKS

Claims 1, 3-12 and 14-26 are pending in the present application. In the Office Action mailed March 21, 2007, the Examiner rejected claims 1, 3-12 and 14-26. Claims 1, 12 and 25 have been amended, Claims 7-9, 18-20, 23 and 24 have been cancelled. Applicant believes that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

I. Rejection of Claims 1, 3-6, 10, 12, 14-17, 21 and 23-26 Under 35 U.S.C. § 102

Claims 1, 3-6, 10, 12, 14-17, 21 and 23-26 are rejected under 35 USC § 102(e) as being anticipated by U.S. Patent No. 6,930,949 to Schaefer (hereinafter "Schaefer"). Applicant respectfully traverses to the extent that it may be applicable to the claims as now amended.

The office action correctly indicates under item 5 that Schaefer does not teach that the fixed offset between external and feedback clocks is used to calibrate the delay (Claim 7 of the present application), maximum and minimum delay elements (Claim 8 of the present application) nor selection of center value (Claim 9 of the present application)..

Claims 1 and 12 are amended to incorporate the features of Claims 7, 8 and 9. Since Schaefer does not disclose all of the features of the present application, Schaefer does not anticipate Claims 1 and 12 as presently amended.

In view of the foregoing amendments, Applicant respectfully requests that the 102(e) rejection be withdrawn.

II. Rejection of Claims 11 and 22 Under 35 U.S.C. § 103

Claims 11 and 22 are rejected under 35 USC § 103(a) as being unpatentable over Schaefer. Applicant respectfully traverses to the extent that it may be applicable to the claims as now amended.

With respect to item I and III, Claims 11 and 22 are dependent from allowable Claims 1 and 12 respectively and are therefore presently allowable.

Additionally, the applicant disagrees with the examiner's multiple use of official notice. With regard to applying Schaefer to wireless phones, the examiner suggests that Schaefer teaches precision of timing of memory and therefore since a wireless phone can benefit from precision it would be obvious to use Schaefer. The examiner ignores a critical element in all modern wireless phone design, that element being speed or in this case speed of calibration setup. Schaefer makes no reference to the importance of speed of setup.

The modern wireless device user will not accept a device that is slow to respond. Manufacturers are continuously searching for speed and options but never to the detriment of the user's impression of their experience with the device. If the ergonomics, such as time to access use of the device, is determined to be detrimental to possible sales, it cannot be implemented and the manufacturer has just lost an opportunity to reduce cost or increase efficiency.

The present disclosure lends itself to rapidly selecting a delay calibration value. This speed coupled with "real world acceptable accuracy" opens opportunities unique to the wireless phone industry. In addition to calibrating phones before they leave the factory, wireless phone manufacturers can design such that calibrations are done on every boot-up. Since this calibration takes into account the PVT parameters at point of use and time, the phone may be operated at its maximum efficiency. This reduces manufacturer's cost leading to reduction in wireless device cost.

The explosive growth of the wireless telephone industry has developed many manufacturers of wireless devices, from many countries, covering a very wide spectrum of quality of manufacture. The instant disclosure provides the flexibility needed so that a single chip manufacturer can combine its products with a wider variety of quality of wireless hardware. And a single wireless phone manufacturer can combine with a wider variety of chip manufacturers.

In view of the foregoing amendments, Applicant respectfully requests that the 103(a) rejection of claims 11 and 22 be withdrawn.

III. Rejection of Claims 7-9 and 18-20 Under 35 U.S.C. § 103

Claims 7-9 and 18-20 are rejected under 35 USC § 103(a) as being unpatentable over Schaefer in view of U.S. Patent Application Publication No. 2003/0001634 to Cao *et al.*

(hereinafter “Cao”). Applicant respectfully traverses to the extent that it may be applicable to the claims as now amended.

Cao [0029] states, “...a variation circuit stores the maximum and minimum values output by the delay compensation circuit. Such that information can be used to determine the **range** of PVT operating conditions for a particular application, or to ensure that a chip is not operating outside of this **range**” [emphasis added].

The office action states, Cao mentions “...that maximum and minimum delays are stored and used to select a delay to calibrate the new delay.”

Applicant respectfully disagrees with the office action’s interpretation of Cao. Cao in paragraphs [0091 through [0096] clearly indicates that Cao is disclosing a procedure for keeping their PVT value within a valid, PVT VALID, maximum, PVTMAX and a minimum PVTMIN, range. Cao makes no mention of combining a maximum and minimum together for determination of a calibration delay.

Cao [0091] “...the new PVT value is compared to PVTMIN and PVTMAX.”

Cao [0092] “... causing the register ... to accept the new PVT value as PVTMIN.”

Cao [0093] “... causing the register ... to accept the new PVT value as PCTMAX.”

Cao [0096] “By examining PVTMIN and PVTMAX ... it can be determined whether the upper or lower operating limit was exceeded.”

Cao [0094] “... the signal PVTVALID ensures that the new value of PVT received from delay compensation circuit ... is valid.”

Cao does nothing more than act when their PVT value exceeds parameters. Cao does not disclose using the maximum and minimum together to calibrate delay.

Cao [0092] “If comparator ... determines that the new PVT value is smaller than PVTMIN, its output becomes ...” “If both the output of comparator ... and signal PVTVALID are high, then ... causing the register ... to accept the new PVT value as PVTMIN.”

Cao [0093] “If comparator ... determines that the new PVT value is greater than PVTMAX it outputs ...causing the register ... to accept the new PVT as PVTMIN.”

In contrast, the present application determines a maximum and minimum and then selects a mid point based off of these values.

Neither Schaefer nor Cao either alone or in conjunction disclose selecting a delay calibration based off of both maximum and minimum values.

In view of the foregoing amendments, Applicant respectfully requests that the rejection of claims 7-9 and 18-20 and any claims dependent there from still pending in this case, be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated 21 September 2007

:

By: /William Marcus Hooks/

William Marcus Hooks, Reg. No. 48,857
Telephone: (858) 658-5932

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502